

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

ROAD TECH SERIES FUEL PRODUCTS

Synonyms:

FUEL STABILIZER
GAS TREATMENT
FUEL INJECTOR CLEANER
OCTANE TREATMENT

Manufacturing Company Identification

Champion Brands, L.L.C., 1001 Golden Drive, Clinton, MO 64735
PHONE: 800-821-5693 WEBSITE: www.championbrands.com

CAS Registry Number Not Applicable

Synonyms None

Generic/Chemical Name Mixture

Product Type Fuel Additive

Preparation Date March 20, 2007

Transportation Emergency Response

CHEMTREC: (800) 424-9300

Product Information

Product Information and MSDS Requests: (800) 821-5693 and www.championbrands.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENTS	CAS #	EC (EINECS)#	Symbols/Phrases [†]	AMOUNT
Mineral spirits	8052-41-3	232-489-3	Xn: R10, R51/53, R65, R66, R67, S16, S23, S36, S60, S62	0 – 99% wt
Polyether amine	Proprietary			0.0 - 40.0 %wt
Methylcyclopentadienyl-Manganese Tricarbonyl	12108-13-3	235-166-5	T, Carc Cat 2: R23/24/25, R40, S2, S36/37/39	0.0 - <1.0 %wt

[†]See section 16 for full-text description of symbols and phrases

3. HAZARD IDENTIFICATION

Warning – Keep away from sources of ignition**Health Hazards**

This product may be fatal if ingested or inhaled in large quantities. Exposure to vapor may cause difficulty breathing, central nervous system depression, nausea, dizziness, drowsiness, headache, or loss of consciousness. If symptoms occur, move to fresh air. Exposure to skin may cause dryness, cracking, or irritation. If swallowed, this product poses a significant aspiration hazard. DO NOT INDUCE VOMITING. Symptoms of ingestion may include abdominal cramping, diarrhea, or nausea.

4. FIRST AID MEASURES

Eye: Immediately flush eyes with running water for at least 15 minutes. Remove contact lenses. Wash under eyelids

Skin: Remove contaminated clothing and wash the area thoroughly with soap and water. If skin is excessively dry or irritated, use a moisturizing lotion. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency

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Ingestion: Aspiration hazard, DO NOT INDUCE VOMITING. Product may cause lung damage if swallowed. If significant volume has been ingested and patient is conscious, dilute with one to two glasses of water. Never give anything to an unconscious person. Seek medical attention immediately! If victim is not breathing, give artificial respiration or mouth-to-mouth.

Inhalation: If symptoms develop, move to fresh air immediately. If victim is unconscious, give oxygen. If victim is not breathing or has difficulty breathing, give artificial respiration or mouth-to-mouth, then give oxygen.

5. FIRE FIGHTING MEASURES

FIRE CLASSIFICATION:

OSHA Classification (29 CFR 1910.1200): Not classified by OSHA as flammable or combustible.

NFPA RATINGS: Health: 1 Flammability: 2 Reactivity: 0

FLAMMABLE PROPERTIES:

Flashpoint: 38°C (>100.4°F) Tag Closed Cup

Autoignition: 210°C (410°F)

Flammability (Explosive) Limits (% by volume in air): Lower: 0.8% Upper: 5%

EXTINGUISHING MEDIA: Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.

PROTECTION OF FIRE FIGHTERS:

Fire Fighting Instructions: This material and its vapors are flammable. Vapors can travel long distances along the floor and flash back if ignited. If possible, cool sealed containers with fog to prevent ignition or explosion. Can become explosive in the presence of strong oxidizers.

Combustion Products: Carbon dioxide, carbon monoxide, nitrogen oxides, manganese oxides

6. ACCIDENTAL RELEASE INFORMATION

Protective Measures: Eliminate all sources of ignition in vicinity of spilled material.

Spill Management: Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

Reporting: Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

7. HANDLING AND STORAGE

Precautionary Measures: DO NOT USE in the vicinity of flames, sparks and hot surfaces. Use only in well ventilated areas. Keep container closed. Keep out of the reach of children. Do not breathe vapors; use suitable respiratory equipment where ventilation is insufficient.

General Handling Information: Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water. Store only in tightly-sealed containers. Store in a cool place away from strong oxidizers and strong acids.

Static Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating an accumulation of electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106, 'Flammable and Combustible Liquids', National Fire Protection Association (NFPA 77, 'Recommended Practice on Static Electricity', and/or the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents'.

Container Warnings: Container is not designed to contain pressure. Do not use pressure to empty container or it

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may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly

8. EXPOSURE CONTROL/PERSONAL PROTECTIVE EQUIPMENT

GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Special note: Do not use in breathing air apparatus or medical equipment.

ENGINEERING CONTROLS:

Use in a well-ventilated area.

PERSONAL PROTECTIVE EQUIPMENT

Eye/Face Protection: No special eye protection is normally required. Where splashing or contact with the eyes is more likely, wear safety goggles with side shield, or preferably, chemical splash goggles.

Skin Protection: No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances in the workplace. Suggested materials for protective gloves include: 4H (PE/EVAL), Nitrile Rubber, Silver Shield, Viton.

Respiratory Protection: If ventilation is not sufficient to keep exposure below recommended levels, wear an approved respirator that provides adequate protection from the measured concentrations of this material.

Occupational Exposure Limits:

Component	OSHA PEL	ACGIH TLV	Other Limits
Mineral Spirits (Stoddard Solvent)	100 PPM	100 PPM	ACGIH TWA (525 mg/m3)
Polyether amine	Not Available	Not Available	NOT AVAILABLE
Methylcyclopentadienyl Manganese Tricarbonyl	ACGIH: Skin TWA: 0.2 mg/m3 8 hour(s).	ACGIH: Skin TWA: 0.2 mg/m3 8 hour(s).	NIOSH (0.2mg/m3)

9. PHYSICAL AND CHEMICAL PROPERTIES

Attention: the data below are typical values and do not constitute a specification.

Appearance and Odor: Colorless to Brown oily liquid.

pH: NA

Vapor Pressure: <0.01 mmHg @ 100 °F , 0.2mmHg @ 20 °C (68 °F)

Vapor Density (Air = 1): >1

Boiling Point: >320 °F (160 °C)

Solubility: Soluble in hydrocarbons; insoluble in water

Freezing Point: No Data

Melting Point: No Data

Specific Gravity: 0.77 @ 15.6 °C / 15.6 °C

Viscosity: 1.4 cSt @ 40 °C (104 °F)

10. STABILITY AND REACTIVITY

Chemical Stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. Methylcyclopentadienyl manganese tricarbonyl (CAS # 12108-13-3) can decompose under thermal or photolytic conditions. Keep material away from oxidizers

Incompatibility With Other Materials: May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

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Hazardous Decomposition Products: Carbon monoxide, nitrogen oxides, manganese oxides, and Aldehydes.
Hazardous Polymerization: Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

IMMEDIATE HEALTH EFFECTS

Eye Irritation: The eye irritation hazard is based on evaluation of data for similar materials or product components.

Skin Irritation: The skin irritation hazard is based on evaluation of data for similar materials or product components.

Skin Sensitization: No product toxicology data available.

Acute Dermal Toxicity: The acute dermal toxicity hazard is based on evaluation of data for similar materials or product components.

Acute Oral Toxicity: The acute oral toxicity hazard is based on evaluation of data for similar materials or product components.

Acute Inhalation Toxicity: The acute inhalation toxicity hazard is based on evaluation of data for similar materials or product components.

ADDITIONAL TOXICOLOGY INFORMATION:

This product is toxic to the lungs, mucous membranes and nervous system. This product may contain dilute methylcyclopentadienyl manganese tricarbonyl (MMT), which has limited evidence of carcinogenic effect. Always use good hygiene practices and use appropriate personal protective equipment.

12. ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials.

ECOTOXICITY

Material contains ingredients that are toxic or may degrade into products which are toxic to aquatic organisms

MOBILITY

Expected to partition to sediment and wastewater solids. Expected to evaporate and degrade by thermal or photolytic decomposition

BIOACCUMULATION POTENTIAL

The bioaccumulation potential of this product is not known.

13. DISPOSAL INFORMATION

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

DISPOSAL RECOMMENDATIONS

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

Empty Container Warning:

PRECAUTIONARY LABEL TEXT: Empty containers may retain residue and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to refill or clean container since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations

14. TRANSPORTATION INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

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USA DOT

SHIPPING NAME: Combustible Liquid, n.o.s. (contains light mineral spirits/Stoddard Solvent)
HAZARD CLASS & DIV: COMBUSTIBLE LIQUID
ID NUMBER: NA1993
ERG NUMBER: 128
PACKING GROUP: PG III
PLACARD(s): Combustible

15. REGULATORY INFORMATION

SARA 302 COMPONENTS

Methylcyclopentadienyl manganese tricarbonyl (CAS # 12108-13-3) is subject to reporting by SARA Title III, Sect. 302

EPCRA 311/312 CATEGORIES:

1. Immediate (Acute) Health Effects:	YES
2. Delayed (Chronic) Health Effects:	YES
3. Fire Hazard:	YES
4. Sudden Release of Pressure Hazard:	NO
5. Reactivity Hazard:	NO

CHEMICAL INVENTORIES:

UNITED STATES: All of the components of this material are on the Toxic Substances Control Act (TSCA) Chemical Inventory.

WHMIS CLASSIFICATION:

Class B3 Combustible liquid

EUROPEAN UNION

For complete list of applicable symbols, risk phrases, and safety phrases see section 16[†].

STATE REGULATIONS

Mineral spirits (CAS # 8052-41-3) is listed on the right to know lists of CA, NJ, MN, MA, PA

Methylcyclopentadienyl manganese tricarbonyl (CAS # 12108-13-3) is listed on the right to know lists of MA, PA, NJ

CA Prop 95: This product does not contain materials known to the State of California to cause cancer, birth defects, or reproductive harm

16. DISCLAIMER

[†]Full text description of symbols and phrases

Xn	Harmful
T	Toxic
Carc Cat 2	Category 2 carcinogen; may cause or increase incidence of cancer
R10	Flammable
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed
R40	Limited evidence of carcinogenic effect
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in aquatic environment
R65	Harmful: may cause lung damage if swallowed
R66	Repeated exposure may cause skin dryness or cracking
R67	Vapours may cause drowsiness or dizziness
S2	Keep away from children
S16	Keep away from sources of ignition – No smoking
S23	Do not inhale gas/fumes/vapour/spray
S36	Wear suitable protective clothing
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection
S60	This material and its container must be disposed of as hazardous waste

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S62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label

NFPA RATINGS: Health: 2 Flammability: 2 Reactivity: 0

HMIS RATINGS: Health: 2 Flammability: 2 Reactivity: 0

(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, *-Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

REVISION STATEMENT: Revision updates many sections and the MSDS should be read in its entirety.

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV	-	Threshold Limit Value	TWA	-	Time Weighted Average
STEL	-	Short-term Exposure Limit	PEL	-	Permissible Exposure Limit
CHA	-	Champion LLC	CAS	-	Chemical Abstract Service Number
NDA	-	No Data Available	NA	-	Not Applicable
<=	-	Less Than or Equal To	>=	-	Greater Than or Equal To

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) by Champion LLC, 1001 Golden Drive, Clinton, Missouri 64735.

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